ANCHORAGE WATER & WASTEWATER UTILITY

Operations Division
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Tom Fink,
Mayor

Owned by the Municipality
of Anchorage

October 26, 1990

Ms. Carla Fisher
Environmental Engineer
U.S. Environmental Protection Agency
Ocean Permits Section
1200 Sixth Avenue WD-137
Seattle, WA 98101

Subject: Supplemental Information Pertinent to Renewal Application for NPDES 301(h) Permit #AK-002255-1, Pt. Woronzof Wastewater Treatment Facility

Dear Ms. Fisher:

The referenced facility has achieved 30% or greater BOD removal for the past five consecutive months, May through September. This increased efficiency is the result of a combination of efforts AWWU has undertaken since we became aware last March of the Congressional requirement for 30% BOD removal.

We are now using all six of the facility's clarifiers rather than the three or four we would normally use for the approximate 32 MGD flow we are treating. The resulting substantial increase in detention time has apparently improved SS and BOD removals somewhat.

This summer we had three major fish processors discharging ground-up fish wastes to the sewer system. This has increased influent BOD concentrations to levels higher than would otherwise be experienced during summer months. Since most of the fish waste is settleable, our effluent BOD has not increased. We will continue to encourage more industry of this type.

Phase 3 of our Campbell Lake (C5) Trunk Sewer Repair and Rehabilitation Program was completed this spring. Work is currently underway on the remaining phases of this project, with final completion expected prior to summer 1991. The work completed on this project to date has reduced infiltration by approximately 1 MGD. The remaining work, when finished, is expected to eliminate another 1 MGD.

In addition to these activities which have produced measurable results, we have asked our consultants, CH2M Hill and Kinnetics Laboratories, to review our plant and laboratory operation to determine what other improvements or changes might be made. Both firms agree that the facility and laboratory are very well operated by

professional staff, and see no significant opportunities for improved operations. We are, however, concerned about the accuracy of our influent sampling system and are planning some experiments with Kinnetics staff which we hope will lead to improved sampling techniques. The results of these studies will be documented by Kinnetics and forwarded to you upon completion.

CH2M Hill has performed a feasability study on the aspect of conducting a pilot study using chemical treatment. Laboratory tests have indicated chemical treatment using ferric chloride at dosages above 60 mg/l might guarantee year-round BOD removals greater than 30%. Due to the high capital and operating costs associated with a viable pilot study, we plan to limit further chemical treatment studies to lab testing at least for the short term.

Carla, our purpose in writing you is to let you know that we take the 30% BOD removal problem seriously and that we are earnestly trying to do something about it. We are most appreciative of the cooperation and support you have provided AWWU and are especially grateful to you for letting us know about this problem in time for us to take corrective action. Please continue to keep us informed regarding the status of our permit renewal effort, and don't hestitate to call if we can be of further help.

Sincerely,

J. Kris Warren
Superintendent
Wastewater Treatment Section
Operations Division
AWWU

cc: Richard L. Besse, P.E., General Manager, AWWU
Bill Lamoreaux, ADEC Southcentral Region
Harold Geren, EPA, Seattle, Washington

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